

CONFERENCE AGENDA

The 1987 FASEB Summer Research Conference on "Fc Receptors and Immunoglobulin-Binding Factors" will focus on recent advances in the molecular and cellular biology of immunoglobulin-recognizing molecules and the cells that express them. Sessions will be devoted to important advances that have come from application of the techniques of molecular biology to the study of Fc receptors and immunoglobulin-binding factors. Some sessions will deal with the physiological relevance of cell membrane expressed structures that recognize immunoglobulin constant region determinants while other sessions will deal with the immunoregulatory properties of Fc receptor-bearing lymphocytes and their secreted immunoglobulin-binding factors. The nine sessions are described below with proposed session leaders and speakers. Some of the individuals listed are tentative and to a significant extent the final program will be influenced by our ability to partially support the travel expenses of the invited speakers.

Session I: Molecular Structure of Fc Receptors and Immunoglobulin-Binding Factor Genes and Proteins (I)

J. Unkeless (Mt. Sinai, NY), Chair

P.M. Hogarth (Melbourne, Australia), J. Yodoi (Kyoto), G. Delespesse (Winnepeg), T. Kishimoto (Osaka), K. Moore (Palo Alto) This session will deal with the structure and organization of genes that encode Fc receptors and immunoglobulin-binding factors including the relationship of these genes to each other, to retroviral genes, and to the immunoglobulin super family of genes.

Session II: Molecular Structure of Fc Receptors and Immunoglobulin-Binding Factor Genes and Proteins (II)

H. Metzger (NIH), Chair

A. Kulczyski (Washington University), C. Anderson (Ohio State), D. Conrad (Johns Hopkins) This session will address the current knowledge of the protein structures of immunoglobulin-binding receptors and factors, and the molecules associated with them; high-affinity and low affinity receptors for the same or different isotypes on the same or different cell lineages, such as IgE receptors on mast cells, B lymphocytes and T lymphocytes.

Session III: Immunoregulation by Fc Receptors and Immunoglobulin-Binding Factors (I)

K. Ishizaka (Baltimore), Chair

H. Spiegelberg (Scripps), R. Geha (Harvard), D. Katz (MBI, La Jolla)

This session will focus on the regulation of IgE-Fc receptors and binding factors, and the mechanisms by which IgE-recognizing cells and factors influence the production of IgE antibodies.

Session IV: Immunoregulation by Fc Receptors and Immunoglobulin-Binding Factors (II)

R. Lynch (Iowa), Chair

J. McGhee (U. Alabama), C. Neuport-Sautes (Paris), R. Coico (NYU)

This session will focus on the role of Fc receptors and immunoglobulin-binding factors in the regulation of expression of immunoglobulin heavy chain class; the occurrence and significance of enhanced Fc receptor expression on regulatory T cells in response to immunoglobulin-secreting tumors. The discussions will also focus on suppressor and helper T cells that express receptors for IgG, IgM, IgA or IgD and will address issues such as co-expression and sequential expression of different Fc receptors.

Session V: Signal Transduction

M. Beavan (NIH), Chair

B. Baird (Cornell), I. Pecht (Weizman Institute, Israel), G. Leslie

(Nottingham, UK), T. Ishizaka (Johns Hopkins) This session will address the biochemical events involved in cell triggering via membrane Fc receptors and the molecular basis and functional significance of changes in Fc receptor number, density, avidity, and release. The involvement of protein kinase C in the regulation of receptor-coupled ion channel conductance will be a focus of the discussion as well as consideration of the similarities and differences in signal transduction via Fc receptors on basophils, macrophages and lymphocytes.

Session VI: Immunoglobulin Sites Interacting with Fc Receptors

K. Dorrington (Toronto), Chair

D. Burton (Sheffield, UK), D. Stanworth (UK), W. Weigle (Scripps), B. Birshstein (Albert Einstein, NY) This session will address the epitopes and domains on immunoglobulin molecules recognized by Fc receptors and immunoglobulin-binding factors; their relevance to mechanisms of immunoglobulin function, and the relative contribution of carbohydrates to immunoglobulin binding by Fc receptors and IBF.

Session VII: Internalization and Transport

K. Mostov (MIT), Co-Chair; I. Mellman (Yale), Co-Chair

B. Underdown (Hamilton, Ontario), J. Mestecky (U. Alabama)

This session will focus on the molecular basis and cell biology of immunoglobulin uptake, processing and transport via Fc receptors and the poly-Ig receptor system.

Session VIII: Biology of Host Response

A. Capron (Lillie, France), Chair

D. Segal (NIH), M. Fanger (Dartmouth), I. Witz (Tel Aviv, Israel), M. Boyle (U. Florida) This session will address what is known about the structure and function of Fc receptors and immunoglobulin-binding factors on metazoan parasites, microorganisms, and non-lymphoid cells including tumor cells, and will consider the biological significance of the broad range of occurrence of Fc receptors and immunoglobulin-binding factors.

Session IX: Conclusions and Perspectives

W. Fridman (Curie Institute, Paris), Chair

This session will focus on discussions of what appear to be the established facts, principles and discrepancies in the field, emphasizing what appear to be the important unanswered questions and targets for future investigations.